CLAIMS

1. A composition for controlled release of a biologically active agent from a carrier, wherein the biologically active agent is heparin or a related biologically active acidic polysaccharide and that the carrier is a sol-gel derived silica xerogel, **characterized** in that the xerogel is derived from a tetraalkoxysilane such as tetraethoxysilane (TEOS) and that part of the tetraalkoxysilane is replaced by an organomodified alkoxysilane, preferably an alkylsubstituted alkoxysilane.

2. The composition according to claim 1, **characterized** in that the alkylsubstituted alkoxysilane is methyltriethoxysilane (METES), dimethyldiethoxysilane (DMDES) or ethyltriethoxysilane (ETES).

3. The composition according to claim 1 or 2, **characterized** in that the biologically active agent is heparin in an amount of 5 to 30 weight-% calculated on the air dried xerogel.

4. A method for the preparation of a composition according to any of the claims 1 to 3, **characterized** by the steps of

a) hydrolysing an alkoxysilane and an organomodified alkoxysilane in the presence of a catalyst,

b) optionally adjusting the pH to a value suitable for the biologically active agent,

c) adding the biologically active agent,

d) allowing the hydroxysilane to polymerize, and optionally

e) removing water and alcohol formed in the hydrolyzation from the mixture.

5. The method according to claim 4, **characterized** in that the alkoxysilane is a tetraalkoxysilane such as tetraethoxysilane (TEOS).

6. The method according to claim 5, **characterized** in that the organomodified alkoxysilane is an alkylsubstituted alkoxysilane such as methyltriethoxysilane (METES), dimethyldiethoxysilane (DMDES) or ethyltriethoxysilane (ETES).

7. The method according to claim 4, 5 or 6, **characterized** in that nitric acid or acetic acid is used as catalyst.